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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,825	06/27/2001	Raymond F. Ayala	NORTH-451A/A-2354	4756
7.	7590 10/06/2003		EXAMINER .	
Terry J. Ande	- -	HOLLOWAY III, EDWIN C		
NORTHROP GRUMMAN CORPORATION 1840 Century Park East Los Angeles, CA 90067-2199			ART UNIT	PAPER NUMBER
			2635	51

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No.	Applicant(s)				
09/892,825	AYALA ET AL.				
, Office Action Summary Examiner	Art Unit				
Edwin C. Holloway, III	2635				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (3 If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTH: - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABAN. - Any reply received by the Office later than three months after the mailing date of this communication, even if time earned patent term adjustment. See 37 CFR 1.704(b). Status	y be timely filed 30) days will be considered timely. S from the mailing date of this communication. IDONED (35 U.S.C. § 133).				
1)⊠ Responsive to communication(s) filed on <u>27 June 2001</u> .					
2a) ☐ This action is FINAL . 2b) ☐ This action is non-final.					
3) Since this application is in condition for allowance except for formal matter closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. Disposition of Claims					
4)⊠ Claim(s) <u>1-5</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-5</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
9) The specification is objected to by the Examiner.	•				
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.					
If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:					
1.☐ Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been re application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not recommend.	ceived in this National Stage				
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).					
a) The translation of the foreign language provisional application has bee 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§					
Attachment(s)					
	mmary (PTO-413) Paper No(s) ormal Patent Application (PTO-152)				

Page 2

Application/Control Number: 09/892,825

Art Unit: 2635

EXAMINER'S RESPONSE

1. In response to the application filed 6-27-01 the application has been examined. The examiner has considered the presentation of claims in view of the disclosure and the present state of the prior art. And it is the examiner's opinion that the claims are unpatentable for the reasons set forth in this Office action:

Claim Rejections - 35 USC § 102 & 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 4. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henderson (US 4914732) and Hyatt '044 in

Page 3

Application/Control Number: 09/892,825

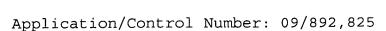
Art Unit: 2635

combination with Trombly (US 4207555), Perron (US 4031434), Aston (US 5351042) or Kilman (US 5479799).

Henderson discloses an electronic key 14 in fig. 12 having keypad 48 and display 50. The key includes coil 54 to communicate by electromagnetic energy to a lock 12 including coil 26 in fig. 9. The key includes a list of codes with expiration date in fig. 13 and includes two way exchange of information to open the lock. See col. 4 line 30 - col. 6 line 47 and col. 8 line 40 - col. 12 line 35. Henderson differs from the claims by not including transmitting power from the key to the lock and not including the lock transmitting a variable interrogation.

Hyatt '044 discloses an analogous art lock system with the lock transmitting a seed number to the key which is encrypted with the code returned from the key. Since the seed is updated at the lock with each operation, it provides a variable interrogation. See figs. 9-12 and col. 6 line 62 - col. 8 line 58. Trombly, Perron, Aston and Kilman discloses keys inductively transmitting power and data to the lock.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in Henderson the variable interrogation and encryption of Hyatt '044 for increased security against code stealing and improper



Art Unit: 2635

code input. It further would have been obvious to have included the inductive power transmission of Trombly, Perron, Aston or Kilman to maintain power on the lock suggested by Henderson including coils to communicate and transmitting power status from the lock to the key in cols. 10 and 29. Regarding claim 4, the power status signal of Henderson being directed to transmitted power would have been obvious in view of transmitted power in Trombly, Perron, Aston and Kilman.

Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henderson (US 4914732) and Hyatt '044 in combination with Trombly (US 4207555), Perron (US 4031434), Aston (US 5351042) or Kilman (US 5479799) as applied above and further in view of Roddy (US 5889603). Roddy discloses an analogous art lock and key system where the lock recharges power on the key and the key sends power status back to the lock so that the lock stops transmitting power when the key is fully charged to reduce heat build up in col. 4 lines 18-34. Regarding claim 4, the power status signal of Henderson being directed to transmitted power would further have been obvious in view of Roddy disclosing sending a power status signal corresponding to transmitted power. Regarding claim 5, it also would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the combination Application/Control Number: 09/892,825

Art Unit: 2635

applied above the transmitting of power until a signal indicating sufficient power is returned as disclosed in Roddy to reduce heat build up. Although Ruddy communicates the power from the lock to the key and status from the key to the lock, the difference would have been obvious in because Henderson discloses communicating status in the claimed direction and the other patent communicate power in the claimed direction and problem of heat build up would be overcome regardless of direction.

CONTACT INFORMATION

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology center 2600 receptionist whose telephone number is (703) 305-4700.

Facsimile submissions may be sent via fax number (703) 872-9314 to customer service for entry by technical support staff. Questions regarding fax submissions should be directed to customer service voice line (703) 306-0377.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edwin C. Holloway, III whose telephone number is (703) 305-4818. The examiner can normally be reached on M-F (8:30:-5:00). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on (703) 305-4704.

EH 9/30/03 EDWIN C. HOLLOWAY, III PRIMARY EXAMINER ART UNIT 2635 Page 5